

- 10. The polyurethane layer according to claim 8, characterized by having a thin layer of polyurethane towards the outer surface which contains non-expanded or no hollow spheres.
- 11. The polyurethane layer according to claim 8, characterized in that said expanded hollow spheres have diameters of from 20 to 100 μ m, preferably from 30 to 50 μ m.
- 12. The polyurethane layer according to claim 10, characterized in that said non-expanded hollow spheres have diameters of from 6 to 16 μ m, preferably from 6 to 9 μ m.
 - 13. The polyurethane layer according to claim 8, characterized in that the inner surface of the polyurethane layer is in contact with a carrier made of metal or plastic.
 - 14. A method for the preparation of a compressible polyurethane layer having outer and inner surfaces on or for rotation-symmetrical bodies according to claim 8, characterized in that a freshly prepared mixture of diisocyanate and polyol or polyamine is applied by rotational casting to a roller-shaped carrier, one or both of the two components containing said expanded and optionally the non-expanded hollow spheres, followed, if desired, by withdrawing the polyurethane layer from the carrier and, if desired, by cutting it open.